

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF MISSOURI**

TEDDY SCOTT AND MELANIE SCOTT,)	
)	Case No. 4:16-cv-1440-HEA
Plaintiffs.)	
v.)	Judge Henry Edward Autrey
DYNO NOBEL, INC.,)	
)	
Defendant.)	
)	

**DEFENDANT DYNO NOBEL’S MEMORANDUM IN SUPPORT OF RULE 50 PRE-
VERDICT MOTION FOR JUDGMENT AS A MATTER OF LAW**

Defendant Dyno Nobel, Inc. (“Dyno”), by and through counsel, submits its memorandum of points and authorities in support of its pre-verdict motion for judgment as a matter of law pursuant to Federal Rule of Civil Procedure 50(a).

INTRODUCTION

The Court is familiar with parties’ claims in this case: Plaintiff Teddy Scott claims he was injured by emissions from one of Dyno’s stacks on March 20, 2015. Mr. Scott’s wife, Plaintiff Melanie Scott, asserts a loss of consortium claim. As has become clear over the course of the presentation of evidence during the trial of this matter, Plaintiffs lack sufficient evidence to submit a triable issue to the jury on critical elements of their claims.

First, despite that the Eighth Circuit Court of Appeal’s ruling in this case rested on specific pieces of evidence that Plaintiffs promised would be presented at trial, in large measure, Plaintiffs have failed to deliver on those promises. Because Plaintiffs have failed to present the evidence expected by the Eighth Circuit on the question of foreseeability, they have failed to carry their burden of creating a triable issue of fact on that issue and judgment as a matter of law

is appropriate.

Second, Plaintiffs have failed to present sufficient evidence to sustain a jury verdict on the question of whether Dyno breached an applicable standard of care. This Court’s finding that Plaintiffs’ sole expert on this issue, Ms. Morningstar, “admittedly has no experience working with nitric acid,” foreclosed Plaintiffs from ever presenting sufficient admissible evidence on this issue. (ECF 231 at 12.) It was not sufficient for Plaintiffs to present evidence about the standards of care applicable to chemical plants in “adjacent” industries; rather, under clear Eighth Circuit and Missouri Court of Appeals precedent, without admissible expert testimony about the standards of care applicable to nitric acid plants, Plaintiffs failed to tender sufficient evidence of Dyno’s breach of any applicable standards of care to sustain a jury verdict.

Third, Plaintiffs failed to present sufficient evidence of medical causation to sustain a jury’s verdict and therefore judgment should also be entered for that reason. Dr. Carla Sevin did not perform a valid differential diagnosis in order to be able to give a valid causation opinion, and the evidence presented at trial has finally revealed that Dr. Sevin’s reliance on the Heritage Environmental Report to establish Mr. Scott’s exposure is entirely misplaced—the report actually says the *opposite*.

Finally, because Plaintiffs failed to present adequate evidence to sustain their punitive damages claims as well, the Court should grant Dyno judgment as a matter of law on that claim. For all the reasons explained above, Plaintiffs can never establish with clear-and-convincing evidence that Dyno acted with the requisite extreme degree of fault that is necessary to sustain an award of punitive damages.

ARGUMENT

I. THE STANDARD FOR PRE-VERDICT MOTIONS FOR JUDGMENT AS A MATTER OF LAW.

“A motion for judgment as a matter of law presents a legal question to the district court and to this court on review: whether there is sufficient evidence to support a jury verdict.” *McKnight By & Through Ludwig v. Johnson Controls, Inc.*, 36 F.3d 1396, 1400 (8th Cir. 1994) (cleaned up). It is appropriate “when all of the evidence points one way and is susceptible of no reasonable inference sustaining the position of the nonmoving party.” *Allstate Indem. Co. v. Dixon*, 932 F.3d 696, 702 (8th Cir. 2019).

II. PLAINTIFFS FAILED TO PRESENT SUFFICIENT EVIDENCE OF FORESEEABILITY TO ESTABLISH EITHER A LEGAL DUTY OR PROXIMATE CAUSE.

When the Eighth Circuit ruled on appeal that the question of whether Dyno owed a duty to Plaintiffs was a question of fact, it did so based on Plaintiffs’ overemphasis of the weight of the admissible evidence. Of course, promises of evidence that will be elicited at trial often go unfulfilled. Just because a plaintiff promises certain evidence will be presented at the summary judgment stage does not mean that the evidence at trial will meet those promises. Here, Plaintiffs promised the Eighth Circuit that particular evidence would be elicited to create a question for the jury on the question of foreseeability. The Eighth Circuit pointed to three specific pieces of evidence that Plaintiffs promised they would present at trial to establish foreseeability. But at trial, Plaintiffs failed to deliver the goods—the have not presented the evidence they promised the Eighth Circuit.

For example, “[w]hile Dyno’s expert opined that NO_x emissions rise from the smokestack because the stack heats them to 150 degrees Fahrenheit,” Plaintiffs promised “evidence that the stack temperature at the time of the emissions at issue was only 75 to 105

degrees.” *Scott*, 967 F.3d at 747. While Dyno’s experts testified consistently with Dyno’s representations (Trial Tr. 8A 37:22-24), Ms. Morningstar was singing a very different tune at trial:

The light blue line is the stack vent temperature. So at 8:16, we started seeing air to the converter. And at 8:26, something hot went through the stack. Right? It bumped the temperature from about 69 degrees to a little over 200 degrees.

(Trial Tr. 2B 74:13-17.) The emission that Ms. Morningstar now believes contacted Plaintiff exited Dyno’s 108-foot stack at over 200 degrees—and into air with an ambient temperature of less than 40 degrees. As every qualified expert has testified, this would have caused the plume to immediately rise and dissipate. (Trial Tr. 8A 38:2-41:3.)

Plaintiffs also promised the Eighth Circuit that they would present “evidence the wind was blowing in th[e] direction [of the Calumet plant] at the time of the startup.” *Id.* at 747. But Plaintiffs have presented no such testimony or evidence of any kind. Plaintiffs’ own expert, Ms. Morningstar, testified the “best weather data” from the “closest weather station” showed the winds blowing consistently towards the east—away from the Calumet plant. (Trial Tr. 107:18-110:13.) While a few of Plaintiffs’ witnesses described variable winds, there has been no evidence presented in any form that that the wind was blowing from Dyno to Calumet that morning. Again, Plaintiffs have failed to adduce the promised evidence.

Likewise, the Eighth Circuit believed Plaintiffs’ claims that evidence would be presented at trial that on day in question, March 20, 2015, the weather was “hazy with low, swirling winds.” *Id.* at 744. But only one witness, Mr. Chidster, has described the winds as “swirling” that day—no other witness, including Plaintiffs’ expert, has given that description. And only one witness, Thomas Branham, described the day as “hazy,” but immediately clarified that it was “[n]ot really foggy.” Mr. Scott didn’t agree with either of these two characterizations; and Mr.

Chidster didn't suggest it was foggy while Mr. Branham didn't claim the winds were swirling. Most every other witness testified that they perceived winds to be towards the east that morning, and, as noted above, Plaintiffs' expert, Ms. Morningstar, agreed that the best available meteorological data from the Pittsfield weather station established that the winds that morning were steady and towards the east.

Because Plaintiffs have failed to present at trial the evidence they promised the Eighth Circuit would be presented—upon which that court relied to find a question of fact on the issue of foreseeability necessary to establish a legal duty—this Court should grant Dyno judgment as a matter of law on Plaintiffs' remaining claims.

For similar reasons, Plaintiffs failed to present sufficient evidence of proximate cause to sustain a jury's verdict. As the Eighth Circuit noted in this case, the “foreseeability component of proximate cause refers to whether a defendant could have anticipated a particular chain of events that resulted in injury.” *Scott v. Dyno Nobel, Inc.*, 967 F.3d 741, 746 n.2 (8th Cir. 2020). Plaintiffs' evidence falls short of establishing that Dyno could have expected the events alleged to have occurred on March 20, 2015. Again, the known laws of physics suggested that Dyno's start-up would occur without problems that morning. Plaintiffs have presented no admissible evidence to counter this basic, irrefutable fact.

III. PLAINTIFFS FAILED TO PRESENT SUFFICIENT EVIDENCE ON THE APPLICABLE STANDARDS OF CARE AND DYNO'S PUORPTED BREACH OF THEM.

The Court previously ruled that Plaintiffs' expert witness, Jennifer Morningstar, may not opine about what an “ordinarily careful nitric acid manufacturer” would have done or that “Dyno failed to use that degree of care that an ordinarily careful nitric acid manufacturer should use under the circumstances.” (ECF 231 at 10, 12, 17.) Instead, during the trial, she was limited to testifying generically about the duties of an “ordinarily careful chemical plant” rather than those

specifically of a nitric acid plant. (*E.g.*, Trial Tr. 2B 50:7-9.)

Under Missouri law, this was categorically insufficient for Plaintiffs to carry their burden of establishing Dyno was negligent. Notwithstanding Ms. Morningstar’s generic testimony about standards of care applicable to “chemical plants,” the law still requires that Plaintiffs establish the relevant standard of care *specifically* for an “ordinarily careful nitric acid manufacturer,” not merely for a generic “chemical plant.”

To establish a breach of the duty of care in professional contexts, “an expert witness is generally necessary to tell the jury what the defendant should or should not have done under the particular circumstances and whether the defendant's actions violated the standards of care of the profession and, thereby, constituted negligence.” *Rosemann v. Sigillito*, 956 F. Supp. 2d 1082, 1110 (E.D. Mo. 2013) (quotations and citations omitted). “Expert testimony is required to prove professional negligence when the case deals with issues involving matters outside the common knowledge and experience of laypersons.” *Stalcup v. Orthotic & Prosthetic Lab, Inc.*, 989 S.W.2d 654, 657 (Mo. App. 1999).

The Court earlier dismissed Dyno’s authority on this point as “only cases involving professional negligence” (ECF 231 at 25), but the Missouri Court of Appeals held the same principles apply outside of the medical malpractice/professional negligence context, including to such issues as the “standard of care in the industry for [a plumber] installing a gasket for a . . . water meter.” *Freight House Lofts Condo Ass’n v. VSI Meter Servs., Inc.*, 402 S.W.3d 586, 598 (Mo. Ct. App. 2013). In *Freight House*, the court sustained the expert’s opinion as admissible because he testified that, specific to that type of meter, it was industry standard not to modify the gasket in anyway and to place and seal it in certain ways. *Id.* Contrary to this Court’s ruling that professional negligence cases are different than ordinary negligence cases on this

issue, the *Freight House* court specifically looked to Missouri authority from the medical malpractice context to determine the level of specificity an expert must testify about to establish the standard of care for a plumber. *See id.* at 598 (relying on the Missouri Court of Appeals’ opinion in *Hickman v. Branson Ear, Nose & Throat, Inc.*, 256 S.W.3d 120, 123 (Mo. banc 2008), a medical malpractice case, to determine what an expert must testify to establish the standard of care in a plumbing negligence case).

Furthermore, the principles underlying the authority cited by Dyno remain, regardless of whether this is a professional negligence case or not. Plaintiffs must provide expert testimony about the specific standards of care that apply to nitric acid plants because such issues involve complex chemical and mechanical technology that is beyond the understanding of the average juror. Whether the alleged negligence involves brain surgery, installation of a water pump, or starting up a nitric acid plant, a plaintiff must present specific expert testimony about the applicable standards of care that govern each situation to satisfy its burden, regardless of whether the allegedly negligent party can be described as a “professional.”

Ms. Morningstar’s general testimony about generic chemical plants was insufficient for Plaintiffs to carry their burden of proof under the law. Under controlling law, an expert must have the qualifications to testify about the specific standards of care applicable to the industry in question. The Eighth Circuit’s decision in *Wheeling Pittsburgh Steel Corp. v. Beelman River Terminals, Inc.*, 254 F.3d 706, 715 (8th Cir. 2001), is instructive. In that case, the court recognized that although the plaintiff’s “hydrologist specializing in flood risk management, easily qualifies as an expert under Federal Rule of Evidence 702. The real question is, what is he an expert about?” *Id.* The court noted that the expert, Dr. Curtis, while inarguably an expert in flood risk management, “sorely lacked the education, employment, or other practical personal

experiences to testify as an expert specifically regarding safe warehousing practices.” *Id.* Like Ms. Morningstar’s complete lack of experience with nitric acid plants (Trial Tr. 2B 86:16-24, 87:23-88:2), “Dr. Curtis did not study warehousing practices during his formal education, he has not written about warehousing practices in any of his sixty-plus published articles, and he has never been employed by a warehouseman during any of the twenty-one projects on which he has worked.” *Id.* And like Ms. Morningstar (*id.*; *see also* Trial Tr. 3A 50:16-22), Dr. Curtis “did not compensate for his lack of education or experience about warehousing by, for example, determining or studying the actions of other warehousemen along the Mississippi River in response to this or any other flood.” *Id.*

Ultimately, the Eighth Circuit “conclude[d] that the district court erred in allowing Dr. Curtis to testify beyond the scope of his expertise and that the inadmissible opinions expressed by him prejudiced Wheeling” because “Dr. Curtis repeatedly offered opinion testimony outside of his area of expertise . . . —namely, whether [the defendant’s] actions met the required standard of care for warehousemen.” *Id.* The same result should occur here.

Ms. Morningstar never offered opinions about the standards of care applicable to nitric acid plants because “Ms. Morningstar admittedly has no experience working with nitric acid.” (ECF 231 at 12.) Ms. Morningstar’s generic testimony about chemical plants was categorically insufficient to sustain a jury verdict under Eighth Circuit law and Missouri state court precedent.

Moreover, Ms. Morningstar’s obvious lack of expertise about nitric acid plant threatens grave injustice in this case. Instead of researching the standards in the industry, she started with the facts alleged by Plaintiffs and worked backward to establish tailor-made duties for this Dyno plant. But that is exactly the opposite of how a standard-of-care expert should approach her work—the standards should precede the determination of fault rather than the standards chosen

to establish fault, as Ms. Morningstar has done here. Ms. Morningstar readily admitted that none of her so-called standards-of-care were established with reference to standards applicable to the nitric acid industry—or even the chemical manufacturing industry more generally. (Trial Tr. 2B 126:7-9 (“And you don’t know of any standard in the chemical plant industry that says what time a start-up should occur; correct? A. That’s correct.”); 124: 14-19 (“And when you issued your reports in this case, you had never seen a requirement in which someone has specifically been asked to monitor a plume during start-up in any publication that relates to the chemical manufacturing industry? A. No.”).)

Because Ms. Morningstar is not an expert in the relevant field—and because her opinions in this case demonstrate that she is unfamiliar with the relevant standards-of-care applicable to nitric acid plants—Plaintiffs have failed to present sufficient evidence of Dyno’s breach of the applicable standard of care to sustain a verdict in their favor. Accordingly, the Court should grant Dyno judgment as a matter of law.

IV. PLAINTIFFS FAILED TO PRESENT SUFFICIENT EVIDENCE OF MEDICAL CAUSATION TO SUSTAIN A VERDICT IN THEIR FAVOR.

Under Missouri law, Plaintiffs must present sufficient evidence of “a causal connection between the conduct of the defendant and the resulting injury to the plaintiff.” *Hargis v. Lankford*, 372 S.W.3d 82, 87 (Mo. Ct. App. 2012). A plaintiff must prove both (1) but-for causation—that each defendant’s conduct was an actual cause (or cause-in-fact) of the injuries, *Kasper v. Welhoff*, 298 S.W.3d 59, 62 (Mo. Ct. App. 2009), *as modified* (Oct. 27, 2009), and (2) proximate causation—that the defendant should be held liable “because the harm is the reasonable and probable consequence of the defendant’s conduct,” *Blanks v. Fluor Corp.*, 450 S.W.3d 308, 373 (Mo. Ct. App. 2014).

A. There Are Additional Requirements for Establishing Causation in Toxic Tort Cases.

In toxic tort cases under Missouri law, “a plaintiff must show both that the alleged toxin is capable of causing injuries like that suffered by the plaintiff in human beings subjected to the same level of exposure as the plaintiff, and that the toxin was the cause of the plaintiff’s injury.” *Bonner v. ISP Techs., Inc.*, 259 F.3d 924, 928 (8th Cir. 2001).

These are the requirements of general and specific causation. *Junk v. Terminix Int’l Co.*, 628 F.3d 439, 450 (8th Cir. 2010). “General causation is a showing that the drug or chemical is capable of causing the type of harm from which the plaintiff suffers[, while s]pecific causation is evidence that the drug or chemical in fact caused the harm from which the plaintiff suffers.” *Id.* (internal citation omitted). To prove both types of causation, “expert medical and toxicological testimony is unquestionably required to assist the jury.” *Id.* (internal citation omitted). To successfully demonstrate that a chemical caused injuries, a plaintiff needs “to present expert testimony showing that the [chemical] could have caused [plaintiff’s] injuries and that it did in fact cause those injuries. *Id.* “When an expert’s differential analysis fails to rule in exposure to the alleged cause at issue (general causation) and fails to rule out other possible causes, the specific causation opinion is not sufficiently reliable and should be excluded.” *Kirk v. Schaeffler Grp. USA, Inc.*, 887 F.3d 376, 392 (8th Cir. 2018).

B. Dr. Sevin’s Testimony Is Insufficient Evidence of Medical Causation.

A reliable differential diagnosis alone *may* provide a valid foundation for a medical causation opinion under certain circumstances. *See Turner v. Iowa Fire Equip. Co.*, 229 F.3d 1202, 1209 (8th Cir. 2000). A differential diagnosis is a “technique that identifies the cause of a medical condition by eliminating the likely causes until the most probable cause is isolated.” *Id.* at 1208 (citation omitted).

For *Daubert* purpose, treating physicians are held to the same standard as retained experts. *Id.* at 1207 (“A treating physician’s expert opinion on causation is subject to the same

standards of scientific reliability that govern the expert opinions of physicians hired solely for purposes of litigation.”). While a differential diagnosis for treatment purposes is merely “a systematic comparison of symptoms to *determine which of two or more conditions* is the one from which a patient is suffering,” a differential diagnosis for legal purposes denotes a “technique that identifies the *cause of a medical condition* by eliminating the likely causes until the most probable cause is isolated.” *Id.* (emphasis added). As the Eighth Circuit noted in *Turner*, physicians engaged in the differential diagnosis process for treatment purposes do not have to systematically rule out all other possible causes and are often more concerned with identifying and treating a condition than they are with “identifying the specific substance that caused [the] condition.” *Id.*

The evidence Plaintiffs elicited at trial is insufficient to establish medical causation in this case because no qualified expert performed a legally sufficient differential diagnosis. Dr. Sevin testified that aside from other subjectively reported symptoms of Plaintiff and some others (Sevin Depo. 47:8-23), the ***only objective*** evidence she was aware of that Plaintiff was exposed to NOx or nitric acid—the all-critical “rule in” phase of the differential diagnosis process—was the Heritage Environmental Report. (Ex. K08.) She claims that this “known” release of nitric acid was documented by Heritage Environmental Services in its investigation report. (Sevin Depo 48:2-4; 49:17-21 (claiming that “Heritage Environmental Services . . . described an . . . inadvertent release of nitric acid from the Dyno Nobel facility located adjacent to the point where the patient was working.”)).

But as Plaintiffs’ other expert, Ms. Morningstar, acknowledged (and as Dyno’s expert’s further confirmed), the Heritage Environmental Services report found *exactly the opposite*—that there was ***no evidence of nitric acid or NOx exposure***. (Trial Tr. 2B 116:21-118:3; 7A 76:1-

77:19; 8A 48:12-50:11.) The only reason that Dr. Sevin “ruled in” NO_x or nitric acid as possible causes of Plaintiffs’ ailments is because she mistakenly believed that an independent, third-party testing company had found objective proof of the exposure. But she is entirely and completely mistaken about what that report found—it’s conclusions were the opposite of what she believed.

Furthermore, while Dr. Sevin referred generally to some research she purportedly found relating to NO_x and laryngospasms during the rule-in step—though *never actually referencing specific studies*—Dr. Hartman testified without contradiction that there is no scientific literature or research linking NO_x exposure to **chronic** laryngospasm. (Trial Tr. 7A 41:18-42:3.)

Additionally, Dr. Sevin concedes that she does not know “what chemicals were present in the air what—and in what concentrations” or whether the concentration was “enough to cause injury.” (Sevin Depo 47:15-17; 103:25-104:5.) She believes she can render an opinion without this information based solely on Mr. Scott’s self-reported history. (Sevin Depo 47:18.) Dr. Sevin nevertheless agrees this is vital information—as she explained, the “dose *always* makes the poison.” (Sevin Depo 50:8-10, 17-21; 51:4-6 (emphasis added).)

Dr. Sevin failed during the “rule out” step as well. Even though she admitted that “there are *literally thousands and thousands* of chemicals that could potentially cause . . . irritable larynx” syndrome, she never attempted to rule out any of those thousands of other chemicals as possible causes in this case. (Sevin Depo 47:2–4 (emphasis added).) While she half-heartedly ruled out a few, she did not systematically rule out all possible other causes—the hallmark of a scientifically valid differential diagnosis.

Although Plaintiffs offered evidence of other witnesses about other conditions—primarily Plaintiff’s back—those injuries all supposedly arise from his irritable larynx syndrome. Plaintiffs have offered nobody other than Dr. Sevin to establish that Mr. Scott’s supposed

exposure to NOx on March 20, 2015, caused his irritable larynx syndrome. And because Dr. Sevin's testimony fails the standards of Federal Rule of Evidence 702 and Plaintiffs' evidence is insufficient to carry their burden on medical causation, judgment as a matter of law should be entered for Dyno.

V. JUDGMENT AS A MATTER OF LAW IS APPROPRIATE BECAUSE PLAINTIFFS HAVE FAILED TO PRESENT SUFFICIENT ADMISSIBLE EVIDENCE TO SUSTAIN THEIR PUNITIVE DAMAGES CLAIM.

“Conduct sufficient to support an award of punitive damages . . . must be ‘more flagrant in nature’ than that sufficient to establish ordinary negligence.” *Johnson v. Cowell Steel Structures, Inc.*, 991 F.2d 474, 478 (8th Cir. 1993) (quoting *Stenson v. Laclede Gas Co.*, 553 S.W.2d 309, 316 (Mo. Ct. App. 1977)). In a case such as this, Plaintiffs must establish by clear and convincing evidence that Dyno was “conscious, from [its] knowledge of the surrounding circumstances and existing conditions, that [its] conduct [on March 20, 2015, would] naturally or probably result in injury” to Plaintiff. *Johnson*, 991 F.2d at 478; *O’Riley v. U.S. Bank, N.A.*, 412 S.W.3d 400, 417 (Mo. Ct. App. 2013) (“Punitive damages are ‘so extraordinary or harsh’ that they should be awarded only sparingly and must be proven by clear and convincing evidence.”). In these circumstances, punitive damages may be allowed “only when the defendant knew or had reason to know that there was a *high degree of probability* that the action would result in injury.” *Hoover’s Dairy, Inc. v. Mid-Am. Dairymen, Inc./Special Prod., Inc.*, 700 S.W.2d 426, 436 (Mo. 1985) (en banc) (emphasis added).

Further, a plaintiff must prove by clear and convincing evidence that “the defendant acted with either an evil motive or a reckless indifference to the plaintiff’s rights” before punitive damages can be awarded. *May v. Nationstar Mortg., LLC*, 852 F.3d 806, 814 (8th Cir. 2017); *see also Ford v. GACS, Inc.*, 265 F.3d 670, 678 (8th Cir. 2001) (“Ultimately, the defendant must have acted with some degree of wantonness or bad motive.”).

Here, Plaintiffs' evidence does not come anywhere close to meeting the clear-and-convincing standard for punitive damages. Plaintiffs' own expert, Ms. Morningstar, agreed that on the morning of March 20, 2015, the prevailing winds were towards the east, which would have carried any emissions from Dyno's stack away from Plaintiff. (Trial Tr. 107:18-110:13.)

While Ms. Morningstar criticized various aspects of Dyno's operations and the way it carried them out on March 20, 2015, at no time did she testify that as a result of those supposed failures, Dyno should have anticipated with a "high degree of probability" that the events Mr. Scott testified happened would happen as a proximate result of their omissions.

To the contrary, even Mr. Scott characterized the breeze that supposedly brought the cloud from the east to the west—*directly contrary to the prevailing winds at the time*—as a "rogue" gust of wind. (Trial Tr. 4B 17:3-4.)

Despite the evidence that others were supposedly exposed along with Plaintiff, there has been *no evidence* presented that any of these others suffered from the same or similar symptoms as Plaintiff. If numerous other individuals were exposed in the same way as Plaintiff but only Plaintiff had a meaningful reaction, that is further evidence that there was no high degree of probability that the purported outcome here would occur from Dyno's activities.

Likewise, and critically, Plaintiffs presented no evidence of any prior incident at the Dyno and Calumet plants during the decades of prior operation even remotely similar to the events alleged here. Dyno's witnesses testified that they have had numerous prior start-ups that involved interruptions that did not result in any emissions falling to the ground and exposing nearby workers. (Trial Tr. 5B 48:2-7.) Plaintiffs have no evidence of any such prior events. (Trial Tr. 2B 118:22-119:19.)

Further, the only experts in air dispersion who provided testimony in this matter testified

without contradiction that based on the known laws of physics and conditions that existed on March 20, 2015, the events described by Plaintiff could not be predicted under the known physical laws that govern how emission plumes behave under these conditions. (*See generally* Trial Tr. 8B.) No witness, whether expert or not, testified that based on the start-up conditions that existed on March 20, 2015, the events alleged to have happened were predictable or expected. The events described by Plaintiff are, quite simply, contrary to the known laws of physics regarding the way gases disperse. (Trial Tr. 8A 41:4-7.)

Johnson v. Cowell Steel Structures, in which the Eighth Circuit affirmed a Rule 50(a) judgment as a matter of law on punitive damages claim under Missouri law, is instructive. 991 F.2d 474 (8th Cir. 1993). In that case, the plaintiffs sought damages sustained from the failure certain welds in a structure. Plaintiff's trial evidence consisted of admissions by the defendant that "it was important to public safety to have sound welds," that defendant "relied on a system of visual inspections," that "a properly conducted visual inspection would reveal a rounded weld bead and that such a bead would indicate that the weld might be defective and should be inspected more closely," that "the welds in the [plaintiffs'] structural steel had rounded beads," that "the defective welds in the steel members installed in the [plaintiffs'] building were not discovered during any visual inspection," as well as evidence that "the fact that the weld beads were rounded, but were not discovered, indicated . . . either no inspections were done, or that the inspection was performed by a person who knew nothing about welding." *Id.* at 478–79.

The Eighth Circuit affirmed the district court's judgment as a matter of law on the plaintiffs' punitive damages claims in *Johnson* because despite the offered evidence, "even when viewed in the [plaintiffs'] favor, supports only one reasonable conclusion as to the verdict on their claim for punitive damages: [defendant] was negligent, but its negligence was not

accompanied by substantial evidence supporting an award of punitive damages.” *Id.* As the court of appeals explained, “[p]oor workmanship which does not create an immediate danger to the safety of others will not justify an award of punitive damages.” *Id.*

Furthermore, the court of appeals noted that the defendant’s “knowledge that sound welds were important to public safety would not support a jury determination that [it] was conscious . . . that failing to discover the defective welds would create a high probability that the [plaintiffs] would be injured.” *Id.* The court of appeals concluded, despite the evidence that the defendant knew weld inspections were important but may not performed them, that “there is no evidence that [the defendant] knew or had reason to know that the welds were defective and did nothing to discover and remedy the defect.” *Id.* (citing *Stenson v. Laclede Gas Co.*, 553 S.W.2d 309, 316 (Mo. Ct. App. 1977)). As the Eighth Circuit specifically noted, “the evidence adduced at trial showed that [the defendant] inspected its welds” as a matter of policy, but that, in this case, those inspections may have been negligent. 991 F.2d at 479.

The evidence adduced here—in the light most favorable to Plaintiffs—falls far short of the proof in *Johnson*, where the Eighth Circuit had no hesitation affirming a judgment as a matter of law on a punitive damages claim. Here, at most, the evidence demonstrates that due unforeseen and unknowable conditions that morning, Dyno’s emissions failed to behave according to the known laws of physics. If that is the case, punitive damages are not appropriate and the jury should not be permitted to award them.

CONCLUSION

For the reasons stated above, the Court should enter judgment as a matter of law in favor of Dyno pursuant to Rule 50(a) of the Federal Rules of Civil Procedure.

Dated: April 29, 2022

Respectfully submitted,

PARSONS BEHLE & LATIMER

/s/ Brandon J. Mark

Julianne P. Blanch (admitted pro hac vice)

Brandon J. Mark (admitted pro hac vice)

And

William S. Thomas #43229MO

wthomas@gotlawstl.com

GAUSNELL, O'KEEFE & THOMAS, LLC

1717 Park Avenue

St. Louis, Missouri 63104

(314) 257-9800

(314) 257-9801 (Fax)

Attorneys for Defendant Dyno Nobel, Inc.

CERTIFICATE OF SERVICE

I hereby certify that on the 29th day of April 2022, I caused to be electronically filed and served the foregoing DEFENDANT DYNO NOBEL'S RULE 50 PRE-VERDICT MOTION FOR JUDGMENT AS A MATTER OF LAW with the Clerk of the Court using the Court's electronic filing system, which sent notification of such filing to all attorneys listed on the docket.

/s/ Brandon J. Mark